**TWO SIGNIFICANT VERTEBRATE FAUNA RECORDS FROM MID-ALTITUDE WET TROPICAL RAINFOREST, LAMB RANGE STATE FOREST.** *Memoirs of the Queensland Museum 38(2): 436. 1995:-* A fauna survey of low to mid altitude wet tropical rainforest on the eastern escarpment of the Lamb Range State Forest (17°00"S, 145°40"E) was conducted as part of the Queensland Electricity Commission's Chalumbin-Woree 275 kV transmission line environmental impact statement. Much of the study area is dominated by vegetation type 2a mesophyll vine forest, with small areas of of types 8, 13c, 13f, 14 and 16a (Tracey, 1982; Kutt et al., 1995). The survey examined 25 potential ridge-top tower sites ranging in altitude from 300-700m including the linear habitat corridor between them. A total of 173 vertebrate fauna species were recorded (Kutt et al., 1995) including twleve of conservation significance. Two of these are considered to be noteworthy and are reported below.

### Northern Bettong *Bettongia tropica*

*Locality:* 17°01'20"S, 145°40'20"E, *Altitude:* 620m, *Date:* 10 November 1994, *Habitat:* ridge top (spur), leading to higher altitude forest, *Vegetation:* Type 13c vine forest with emergent *Eucalyptus grandis* and midstorey *Acacia melanoxylon, A. aulacocarpa* (Tracey, 1982), *Record type:* hair sample in canine faecal pellet. *Number of individuals recorded:* unknown, likely to be single, *Conservation status:* Endangered (Schedule 1, Commonwealth Endangered Species Protection Act 1992).

The Northern Bettong is thought to be restricted to a narrow band of tall open forest (typically *Casuarina torulosa* forest and medium *Eucalyptus acmenoides, E. phaeotricha, E. intermedia* woodland/open forest) on the western edge of the Wet Tropics World Heritage Area, running from Mt Windsor to Ravenshoe (Winter et al., 1991). The site where the Northern Bettong hair sample was collected represents atypical habitat for this species, though it has been historically recorded from closed forest communities (K. Vernes, pers. comm.). It is likely that the hair sample originated *ex-situ*, as canine predators utilise large home ranges (e.g. av. 21km$^2$ for Dingos in south-east Australian forests, av. 39km$^2$ in Kakadu (Corbett, 1995)), with vagrant individuals foraging over even larger distances. Numerous old forestry tracks also traverse the region, which would facilitate rapid movement of large mobile predators. The closest known populations occur 10 km west (straight-line distance), adjacent to Davies Creek National Park. However, given past records of *B. tropica* using rainforest habitat and the occurrence of potentially suitable open forest and rainforest communities in the region between where the hair sample was recovered and Davies Creek, there is a possibility that individuals or populations may exist in other areas in the Lamb Range State Forest.

### Flute-nosed Bat *Murina florium*

*Locality:* 16°59'20"S, 145° 37'00"E, *Altitude:* 640m, *Date:* 21 October 1994, *Habitat:* ridge-top, along access track to transmission line clearing, *Vegetation:* Mesophyll vine forest type 2a, with fringing 13c vine forest (with emergent *Eucalyptus grandis*, midstorey *Acacia melanoxylon, A. aulacocarpa*) on surrounding ridge lines (Tracey, 1982). *Record type:* harp-trap, *Number of individuals recorded:* single male, forearm 35.5mm, *Conservation status:* Vulnerable (Queensland Nature Conservation [Wildlife] Regulation, 1994), *Sympatric species trapped:* Eastern Horseshoe Bat *Rhinolophus megaphyllus*.

The Flute-nosed Bat was once considered Australia's 'rarest' mammal by virtue of a single record from clouded upland (1120 m) rainforest (Richards *et al.* 1983). More recent records include specimens from upland rainforest (>1000m asl) near Ravenshoe, lowland rainforest (<250m) at Rowville and Gap Creek, Cedar Bay, NEQ (H. Spencer, pers. comm.) and from specimens of uncertain taxonomic status from Iron Range (Van Dyck, 1991).

Published knowledge of the bats biology and habitat is limited (Richards et al., 1983; museum records). The capture reported here represents the first mid-altitude record for the species and the first from the Lamb Range State Forest and surrounding region.

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